Recommended Site Activities for Effective IHS-Electronic Health Record Implementation

OVERVIEW:

IHS-Electronic Health Record is a new application supported by the IHS Information Technology Support Center (ITSC). This application enables a Graphical User Interface to be used to display RPMS data, as well as facilitates order entry.

This application is unique in a variety of ways and will take the combined efforts of different segments of facility staff, from IT to medical records to clinicians, to deploy and utilize it to its fullest potential. Some business processes will need to be changed at the participating sites. PCC data will need to be evaluated for quality and changed as needed. Performance metrics will need to be identified to track improvements. Clinicians and others will need to work together to evaluate and possibly redesign business flow to satisfy clinical, technical and business office needs.

The potential benefits of a site's implementation can be significant. The current experience suggests that extra effort will be required to implement and support the system, at least initially. In addition, ITSC anticipates that there will initially be a negative impact on provider productivity However, the improved clinical documentation and coding, , decreased medical errors, improved clinical quality, and increased third party collections experienced by sites should compensate.

Site Activities Overview:

ITSC has compiled a list of activities that should be undertaken by facilities in order to achieve effective implementation of this electronic record. A project plan checklist detailing these recommended decisions and activities will be provided at the web site referenced below. Facilities should be aware that implementation for their first clinic may take 6-9 months to complete.

Key activities that sites should complete include the following:

1. Determine if the site has the resources, budget, and time to implement this
2. Selecting implementation team
3. Ordering appropriate hardware and software
4. Completing site evaluation survey
5. Installing hardware and software
6. Completing a pre-implementation visit
7. Selecting pilot clinic and form template
8. Identifying and baselining metrics
9. Completing workflow changes required
10. Implementing in the first clinic

11. Identifying super users
12. Attend training
13. Establish ingoing process for training and support at the local site

Implementation Team Roles and Responsibilities:

Implementing an electronic health record requires multi-department collaboration. Each facility should select an implementation team that includes representatives from each of the following areas:
1. Clinicians (providers as well as nurses)
2. Registration
3. Data entry
4. Billing
5. Medical records
6. Technical/ site manager support
7. Administration

A project lead and a clinical lead (super user) should be selected for the implementation team.

The project lead should be familiar with RPMS, PCC, and working in graphical user interface environments. The project lead would be expected to spend at least 20 hours/ week on the following:

1. Oversee the implementation project, including design and business process flow
2. re-engineering as needed for implementation
3. act as the point of contact to ITSC for information dissemination, scheduling, etc
4. Set up implementation timelines and tasks
5. Resolve problems and concerns about the electronic health record
6. Develop an appropriate timeframe for implementation
7. Ensure that this time frame is met

The Clinical Lead should be an experienced user of RPMS and PCC. The clinical lead would be expected to spend at least 15 hours/ week on the following:

1. Oversee clinical implementation
2. Institute clinical workflow changes as needed
3. Coordinate clinical training
4. Be available for clinical trouble-shooting during the installation and training
5. period
6. Ensure clinical compliance with new process
7. Facilitate the development of metrics for evaluation and analysis

Team members should be assured appropriate time to participate in these team acitivities and project implementation. This process is estimated to last anywhere from 4-16 weeks. Prior to implementation, team members should be expected to attend team meetings and

actively collaborate with other departments in business process identification and design; metrics identification and data collection; data review as appropriate for their area of expertise; and related activities.

Each team should have one or more 'super users. These super users should be available for the following:

1. Primary responsibility for clinical training on RPMS and PCC in conjunction with the clinical lead
2. Primary responsibility for clinical training on the new electronic health record, in
3. conjunction with the clinical lead

Hardware and Software Specifications and Procurement

The Site Manager and other IT staff must review and understand the hardware and software requirements (and funding) needed for a successful deployment. These needs will vary from site, and should be developed and evaluated in conjunction with the ITSC Project Lead, as well as the ITSC Clinical Lead. A generic System Requirements factsheet will be available on the ITSC website ; this fact sheet will provide a detailed list of minimal hardware and software specifications.

The local implementation team will need to participate in these decisions, as well as local computer placement decisions and network re-design decision (if indicated).

Site Evaluation Survey

Once a site's implementation team is selected, the site should fill our the site evaluation survey. The survey will provide the ITSC team with site specific information that can affect deployment decisions, as well as training needs.

Site Evaluation Visit:

TBD

Metrics:

Implementing a graphical user interface is expected to have significant impact on the delivery of care at a local facility. ITSC anticipates that there will be impact on provider behavior, provider productivity, RPMS clinical data entry, billing , level of E&M codes, medical errors and, ultimately, on quality of care. ITSC strongly recommends that each site select a variety of measurable clinical and business processes that can be documented before (baseline) and after implementation of the electronic health record. These metrics may include the following:

- Data entry backlog
- Medication errors
- Compliance with recommended screening guidelines
- Provider productivity

Sample checklists, as well as measuring techniques, are available in the Metric document (TBD)

Business Process and Workflow Analysis

Sites have identified business process workflow redesign as a key component to successful implementation of an electronic heath record. Clearly, an electronic health record requires certain changes in how a facility does business. The implementation team will need to evaluate the local sites overall strengths and weaknesses, as well as some specific changes that need to be made to accommodate this new process.

Note Taking Templates

TBD

Training:

ITSC will provide on site hands on training activities that are designed for clinical super users (this is dependent upon the availability of local training machines). ITSC will offer on-site training for up to 5 'super-users' for a 3 day period during this on site session.

Local sites will be responsible for training their other clinicians as part of the local site deployment. However, ongoing training support will be available from the ITSC help desk, as well as the ITSC project manager and clinical lead.

Phased Implementation

ITSC believes that this a phased deployment of the electronic health record will facilitate successful deployment. ITSC strongly recommends that a site select one clinic for its initial implementation. Once the new process has been fully implemented, and evaluated, the site would be ready for additional clinical deployment.